06/04/12

# 2013 Scheduling & Planning of Instrumentation Projects

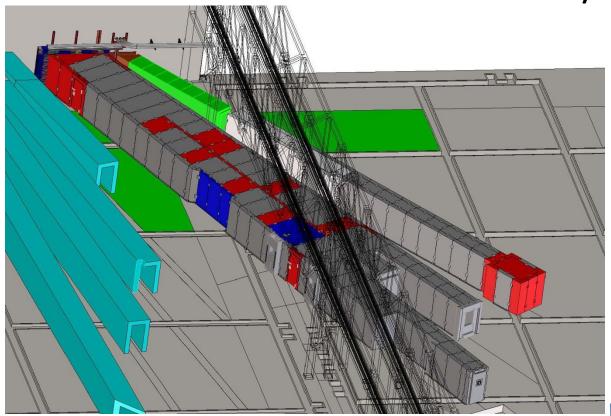
Mike Murbach
NIST Center for Neutron Research



- Outline
  - Projected Guides And Shield Status: 01/01/2013
  - Guide And Instrument Schedule Risk Management
  - Projected Instrument Moves In 2013
  - Schedule For Instrument Installations: 2013
  - December 2013



Projected Guides And Shield Status: 01/01/2013



**Neutron Research** 

- Guide And Instrument Schedule Risk Management
  - Re-design Of Guide Element Support Beams So All Work Can Be Done At NIST Machine Shops
    - Eliminates More Variables In Acquisition Process
    - More Flexibility Should A Change In Production Priorities Be Required
  - Guide Lines Installed Months Before Instrument Installation Target Dates
  - Detailed Planning Of Instrument Moves To Minimize Downtime



- Guide And Instrument Schedule Risk Management
  - Identification Of Over-Allocated Resources
  - Predecessors From Individual Project Schedules Linked To Master Summary Schedule
  - Periodic Check Of Individual Schedule Logic To Detect Errors And Anomalies

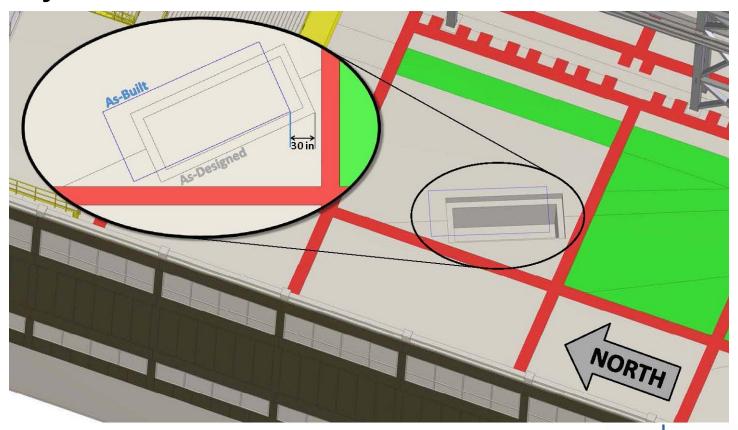


- 30 meter SANS From NG-3 To NG-Bt
- aCORN (Fundamental Neutron Physics Experiment) From NG-6 To NG-C
- Neutron Spin Echo From NG-5 To NG-A
- Reason For Moves Is To Accommodate vSANS On NG-6 In The Future

- 30 meter SANS From NG-3 To NG-Bt
  - Move Target Date: February 2013
  - Anticipated Instrument Downtime: 1 Reactor Cycle
  - Dedicated Project Manager To Facilitate Move And To Coordinate Between All Disciplines Involved. (Rodrigo Vilaseca)



- Projected Instrument Moves In 2013
  - aCORN (Fundamental Neutron Physics Experiment) From NG-6 To NG-C
    - Move Target Date: June 2013
    - Anticipated Instrument Downtime: 2 Reactor Cycles
    - Remediation Of Pit?
      - Pit Installed ~30" North Of Intended Location
      - Center Of Pit Not Coincident With Center Of Sample Area



- Neutron Spin Echo From NG-5 To NG-A
  - Move Target Date: September 2013
  - Anticipated Instrument Downtime: 2 Reactor Cycles
  - Dedicated Project Manager To Facilitate Move And To Coordinate Between All Disciplines Involved. (Ed Binkley)

#### Schedule For Instrument Installations: 2013

				2	013 Expansion Instrumer	nt Moves & Installation	Mon	6/4/12
ID	% Comple	0	Task Name	Duration	Start	Finish	2013 May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov	Dac
1	0%		2013 Instrument Moves & Installations	310 days	Mon 9/17/12	Fri 11/29/13		500
2	0%		Install New Guides and Shields for NG-A in G-100	39 days	Wed 9/19/12	Thu 11/15/12	12	
3	0%		final roof shield bb installation before pgaa installation	0.06 days	Wed 9/19/12	Wed 9/19/12	12	
4	0%		Earliest Chance to Begin Installation of New Guides and Shields for NG-A in G-100	0 days	Wed 9/19/12	Wed 9/19/12	12	
5	0%		Install Roof Shield #30	0.13 days	Thu 11/15/12	Thu 11/15/12	12 h	
6	0%		Complete Installation of New Guides and Shields for NG-A in G-100	0 days	Thu 11/15/12	Thu 11/15/12	1.2	
7	0%		30 meter SANS Move to NG-Bt	145 days	Mon 9/17/12	Fri 4/12/13	13	
8	0%		roof bt end temp	0.06 days	Mon 9/17/12	Mon 9/17/12		
9	0%		Guide Delivery System Available For 30 meter SANS Move to NG-Bt	0 days	Mon 9/17/12	Mon 9/17/12	1.2	
10	0%		Target Date For 30 meter SANS Move	45 days	Mon 2/11/13	Fri 4/12/13	13	
11	0%		Requalify 30 meter SANS	10 days	Fri 3/22/13	Thu 4/4/13	13	
12	0%		Earliest Chance to Finalize 30 meter SANS on NG-Bt	0 days	Thu 4/4/13	Thu 4/4/13	13	
13	0%		aCORN Move to NG-C	240 days	Thu 9/20/12	Wed 8/28/13	13	
14	0%		start physics installation	20 days	Wed 8/22/12	Thu 9/20/12		
15	0%		Guide Delivery System Available For aCORN Move to NG-C	0 days	Thu 9/20/12	Thu 9/20/12	1.2 • • • • • • • • • • • • • • • • • • •	
16	0%		Target Date For aCORN Move	60 days	Thu 6/6/13	Wed 8/28/13		
17	0%		Earliest Chance to Finalize aCORN at NG-C	0 days	Wed 8/28/13	Wed 8/28/13	13	
18	0%		Neutron Spin Echo Move to NG-A	269 days	Thu 11/15/12	Fri 11/29/13		
19	0%		Guide Delivery System Available For Neutron Spin Echo Move to NG-A	0 days	Thu 11/15/12	Thu 11/15/12	1.2 \$11/15	
20	0%		Target Date For Neutron Spin Echo Date	10 days	Mon 8/26/13	Fri 9/6/13	13	
21	0%		Reinstall Spin Echo at NG-A	50 days	Mon 9/9/13	Fri 11/15/13	13	
22	0%		Requalify Neutron Spin Echo at NG-A	10 days	Mon 11/18/13	Fri 11/29/13		
23	0%		Earliest Chance to Finalize Neutron Spin Echo on NG-A	0 days	Fri 11/29/13	Fri 11/29/13	13	11/29

December 2013

